

REMARKS/ARGUMENTS

Claims 1-7 are pending in this application, with claim 1 being the only independent claim. Reconsideration of the above-identified application in view of the following remarks, is respectfully requested.

Rejection under 35 U.S.C. 251

Claims 1-7 are rejected under 35 U.S.C. 251 as being broadened in a reissue application filed outside the two year statutory period. More specifically, the Examiner states that the original claims are broadened because --entrained-flow gasification--, as now recited in the claims, comprises subject matter that is not encompassed by “fluidized bed gasification”, as recited in the original claims. Applicant’s disagree because the scope of the original claims can only be considered to relate to an entrained-flow gasification reactor by one skilled in the art, despite the incorrect term being present in the claims, as explained in more detail below.

The present reissue application was filed to correct a translation error in U.S. Patent No. 5,968,212. More specifically, the German term “Flugstromvergaser” was incorrectly translated as “fluidized bed gasification” and should have been translated as --entrained-flow gasification reactor--. This type of translation error is clearly an error of fact that is correctable by reissue as held in *In re Oda*¹.

The Examiner contends that the amendment to replace “fluidized bed gasification” with --entrained-flow gasification reactor-- broadens the claims. In interpreting claims, the meaning of a claim is the meaning that the claim would have to a person of ordinary skill in the art. In *Philips v. AWH Corp.*² the Federal Circuit Court has stated “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed

¹ 443 F.2d 1200, 170 USPQ 268 (CCPA 1971)

² 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005), cert-denied, 126 S. Ct. 1332 (2006)

term appears, but in the context of the entire patent, including the specification”.³ Therefore, in this particular case, we must first determine the scope of the original claims of U.S. Patent No. 5,968,212 to a person of ordinary skill in the art in the context of the patent specification to determine whether the claims are broadened by the amendment replacing “fluidized bed gasification” with --entrained-flow gasification reactor--.

In rejecting the claims under 35 U.S.C. 251, the Examiner relies on the declaration of Dr. Manfred Schingnitz (filed on April 15, 2008), which explains differences between entrained-flow and fluidized bed gasification. However, Dr. Schingnitz’s declaration further explains that because of these differences one skilled in the art would appreciate that the gasifier referred to by U.S. Patent No. 5,968,212 can not be considered to be a fluidized bed gasifier and can only be considered to be an entrained-flow gasification. Thus, despite the incorrect use of the term “fluidized bed”, the original claims could only be interpreted by those skilled in the art as relating to an entrained-flow gasification reactor.

Since the original claims can only be interpreted as being directed to an entrained flow gasifier, it follows that the replacement of the incorrect term “fluidized bed” with --entrained flow gasification-- does not constitute a broadening of the original claim. Accordingly, the rejection under 35 U.S.C. 251 should be withdrawn.

Oath/Declaration

The Examiner states that the supplemental oath/declaration filed on April 15, 2008 fails to include the signature of each of the inventors. Rule 37 CFR 1.172 provides that the oath or declaration may be made by the assignee if the application does not seek to enlarge the scope of the claims of the original patent. As explained above, the application does not seek to enlarge the scope

³ Phillips, 75 USPQ2d at 1326

of the original claims. Thus the signature of the inventor is not required. Accordingly, the objection to the oath should be withdrawn.

Rejections under 35 U.S.C. §103

Claims 1-7 stand rejected under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 5,464,592 (Booker) in view of U.S. Patent No. 4,188,915 (Kummel).

Independent claim 1 relates to an entrained-flow gasification reactor and recites “a refractory-grade lining configured to form a first, upper part of said reaction chamber”, “a cooling wall configured to form a second, lower part of said reaction chamber, said second part of said reaction chamber including a lower floor and a lower outlet opening, said cooling wall including cooling coils connected in a gas-tight manner”, and “said refractory-grade lining extending downward in a direction parallel to sidewalls of said reactor chamber over said cooling wall in an area of said second part of said reaction chamber including an area of said lower floor, such that said refractory-grade lining and said cooling wall are joined in an overlapping fashion to compensate for different heat expansions”.

Brooker is directed to a gasifier throat structure that includes a cooling system. According to Brooker, a gasifier 10 has an elongated shell 11 with a refractory liner 12 which forms a combustion chamber 13 (see col. 2, lines 11-15; and Fig. 1 of Brooker). A burner 14 is disposed at an upper end of the gasifier (col. 2, line 17-10). The lower end of the gasifier shell 11 includes a floor 19, which is a continuation of the shell and has a conical shape with a constricted throat opening 21 (col. 2, lines 25-32). The throat section 31 of the gasifier is a continuation of the gasifier floor 19 and refractory lining 22 (col. 2, lines 53-55). The throat section 31 also includes a framework of conductors or pipes 32 which are connected to a manifold 36 (col. 2, lines 62-67). Brooker teaches that the framework of pipes 32 can be made

rigid by webbing 39 or vanes such adjacent pipe sections can be welded together (col. 3, lines 24-28). A castable refractory material is molded to the framework 32 to conform the gasifier floor 19 (col. 3, lines 29-34). In one embodiment, the throat section 31 can be installed as a detachable element in the floor structure (col. 3, lines 46-47).

The Examiner states that the throat section 31 of Brooker is the claimed cooling wall. However, independent claim 1 recites that the cooling wall includes “a lower floor and a lower outlet opening”. In contrast, the cooling wall 31 of Brooker defines only an opening. However, even if the cooling wall 31 of Brooker is considered to have a lower floor (which applicants do not believe to be true), Brooker does not disclose, teach, or suggest that “said refractory-grade lining extending downward in a direction parallel to sidewalls of said reactor chamber over said cooling wall in an area of said second part of said reactor chamber”, as expressly recited in independent claim 1.

Kummel fails to teach or suggest what Brooke lacks. Kummel discloses a wall of a gasifier having integral cooling tubes. Kummel fails to teach or separate refractory lining overlapping a cooling wall. Accordingly, independent claim 1 is allowable over Brooker in view of Kummel.

Dependent claims 2-7 are allowable for the same reasons as is independent claim 1, as well as for the additional recitations contained therein.

The application is now deemed to be in condition for allowance and notice to that effect is solicited.

It is believed that no additional fees or charges are required at this time in connection with the present application. However, if any additional fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,
COHEN PONTANI LIEBERMAN & PAVANE LLP

By /Alfred W. Froebrich/
Alfred W. Froebrich
Reg. No. 38,887
551 Fifth Avenue, Suite 1210
New York, New York 10176
(212) 687-2770

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